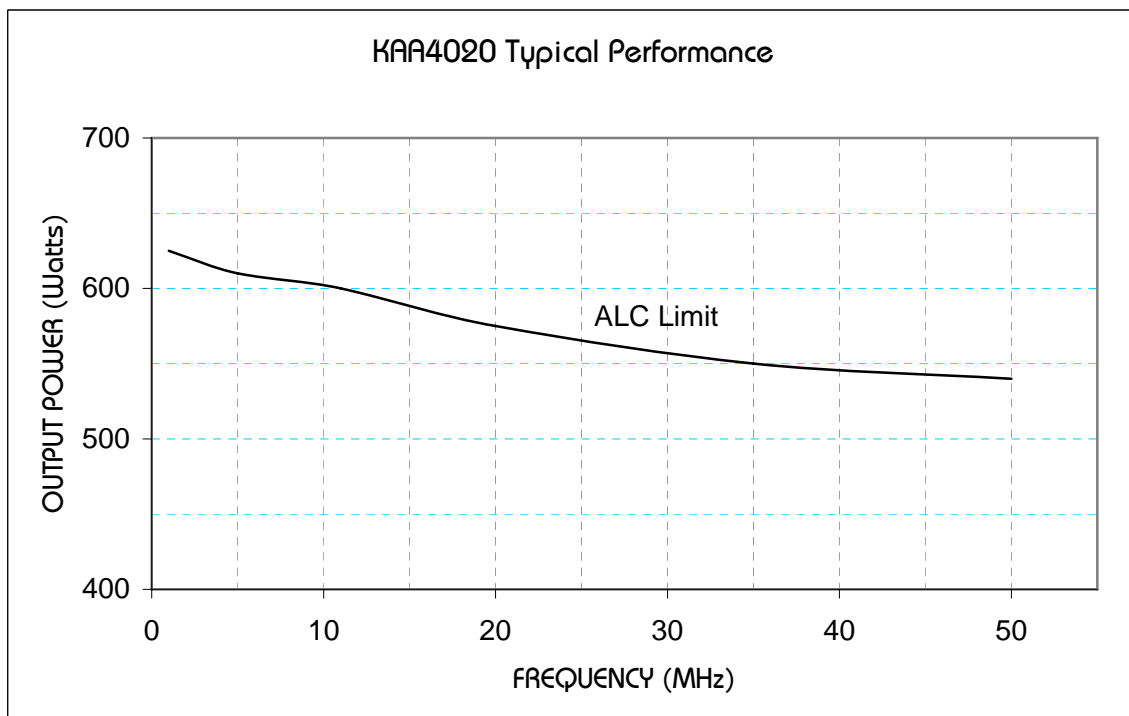


**MODEL KAA4020**  
**500 WATTS CW**  
**1 MHz - 50 MHz**

The Model KAA4020 is a Class AB wideband RF power amplifier that delivers more than 500 Watts CW power into a 50-Ohm load over the frequency range of 1 MHz to 50 MHz. Power gain is a minimum of 57 dB. GPIB control requires the optional IEEE488.2/RS232 Interface Controller Module.

The system features forward and reflected power indication on a front panel-mounted analog meter; Automatic Level Control (ALC); RF gain control; overdrive protection; full VSWR protection; input blanking, and over-temperature protection. On the basic model these features, plus remote power on/off control, are accessible for hard-wire remote operation through a 25-pin, D-subminiature connector. For a detailed description of these features refer to "SPECIAL FEATURES – KAA & KAW-SERIES SINGLE BAND RF POWER AMPLIFIERS".

The Model KAA4020 is a 19-inch rack-mount unit, 8¾ inches high and 26½ inches deep. Construction is completely modular and all subassemblies can be readily removed. Forced-air cooling is by a highly reliable, tube-axial fan mounted on the rear panel. The amplifier operates from 187-265 V<sub>AC</sub>, 47-63 Hz line. The system may be placed in 'stand-by' mode with the BLANKING switch, which greatly reduces energy consumption and heat generation.



**SPECIFICATIONS**  
**Model KAA4020**

RATED POWER OUTPUT .....	500 Watts
INPUT FOR RATED OUTPUT .....	1.0 mW maximum
FLATNESS .....	± 1.5 dB maximum unleveled, ± 0.5 dB leveled
FREQUENCY RESPONSE.....	1 MHz - 50 MHz instantaneously
GAIN .....	57 dB minimum
GAIN ADJUSTMENT RANGE.....	30 dB typical
INPUT IMPEDANCE.....	50 Ohm nominal
OUTPUT IMPEDANCE .....	50 Ohm nominal
MISMATCH TOLERANCE .....	infinite
PROTECTION .....	VSWR, over-temperature, overdrive
MODULATION CAPABILITY.....	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION .....	-13 dBc maximum
SPURIOUS OUTPUTS.....	-70 dBc maximum
FRONT PANEL METER .....	0 - 500 Watt forward power, top scale % limit SET point reflected power, bottom scale
CONTROLS.....	[AC LINE]ON/OFF, [RF CTRL]ON/OFF (blanking) [METER]FLWD/REFL, [ALC]FAST/SLOW (Autom. Level Control) [VSWR]RESET MAN/AUTO, ALC, RF GAIN
INDICATORS .....	SYSTEM, BLANKING, [METER]MODE, [ALC] MODE, VSWR, TEMP, REMOTE ACTIVE
REMOTE INTERFACE (optional).....	IEEE-488.2 & RS-232
RF CONNECTORS .....	Type N female
REMOTE CONTROL.....	IEEE488.2: 24-pin female, RS-232: 25- pin D-Subminiature female
REMOTE INTERLOCK .....	BNC female
OPERATING TEMPERATURE .....	-10 to 40 °C
COOLING.....	Forced air (self contained fans)
PRIMARY POWER .....	187 - 265 V <sub>r</sub> , 47 - 63Hz, single-phase, 1500 VA maximum
SIZE (W x H x D .....	48.3 x 22.2 x 67.3 cm, 19 x 8¾ x 26½ in.
WEIGHT.....	23.6 kg, 52 lb.

**MODEL CONFIGURATIONS**

MODEL NUMBER	OPTION
KAA4020	Standard
KAA4020M1	IEEE 488.2/RS232
KAA4020M11	IEEE 488.2/RS232 + Rear Panel BNC Connector

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REV A